REMARKS

1. Claims 96-118 are pending in this application. Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the discussion that follows.

The abstract of the disclosure has been objected to. Claims 96-118 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirements. Claims 96-118 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 96-104 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 96, 102-104, 105, 111-113, 114 and 118 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,556,992 to Barney et al. Claims 97-101, 106-110 and 115-117 have been rejected under 35 U.S.C. §103(a) as being obvious over Barney et al. in view of U.S. Pat. No. 5,136,646 to Haber et al.

- 2. The abstract of the disclosure has been objected to. In particular, the Examiner asserts that the abstract is over 150 words. However, the abstract was corrected in the Preliminary Amendment filed on September 2, 2004. Since the abstract now has less than 150 words, the objection is improper and should be withdrawn.
- 3. Claims 96-118 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirements. In this regard, the Examiner asserts that "The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention" (Office Action of 10/6/04, page 3). However, "The first paragraph of §112 requires nothing more than objective enablement . . . How such a teaching is set forth, either by the use of illustrative examples or by broad terminology, is of no importance" (In re Marzocchi & Horton, 169 USPQ 367 (CCPA, 1971).

The Examiner inquires "What are the values and how are they assigned?" (Office Action of 10/6/04, page 3). In this regard, the values are clearly described as being "on a scale of 1 to 5" (specification, page 20). Table C of the specification provides an exemplary questionnaire that demonstrates how values may be assigned.

The Examiner inquires "How is the one or more metrics generated?" (Office Action of 10/6/04, page 3). In this regard, "the assigned values may be averaged to provide the relevant metric. Alternatively, the six assigned values may be multiplied and the sixth root taken of the product" (specification, page 24).

The Examiner inquires "What are the logical and mathematical processes used to determine the metrics?" (Office Action of 10/6/04, page 3). As demonstrated above, the logical and mathematical processes may involve averaging of the assigned values or taking the sixth root of the product.

The Examiner inquires "What is the predetermined threshold value by which the comparison is made?" (Office Action of 10/6/04, page 3). As would be clearly understood by those of skill in the art, the predetermined threshold values would be chosen by the user. More specifically, "a defendable trade secret means information in which the defendability factors in combination with one or more threshold values may be used to establish that a court of competent jurisdiction would more likely than not find the existence of a trade secret" (specification, page 24).

The Examiner inquires "How is the application fingerprint created?" (Office Action of 10/6/04, page 3). In this regard, application fingerprints "may be calculated using a deterministic one-way algorithm, such as secure one-way hash codes, thereby providing a unique digital fingerprint associated with the information" (specification, pages 39-40).

The Examiner asserts that "the applicant's specification does not disclose adequate structure for performing the recited functions" (Office Action of 10/6/04, page 3). However, the flow charts of FIGs. 2-11 disclose a multitude of processing steps that would each be performed by a corresponding computer program or subroutine. For example, "In this document, 'processor' means a device capable of performing the step of the specific process under consideration" (specification, page 39). As such, any reference to a process step in the specification is also a reference to the processor that performs that process step.

In addition, "As a matter of Patent Office Practice, then, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of § 112 *unless* there is reason to doubt the objective truth of the statements contained therein which

must be relied upon for enabling support" (In re Marzocchi & Horton, 169 USPQ 367 (CCPA, 1971). Since the Examiner has failed to provide a basis for doubting the objective truth of the specification, the rejection is believed to be improper and should be withdrawn.

4. Claims 96-118 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In this regard, the Examiner inquires "What are generally accepted legal criteria?" (Office Action of 10/6/04, page 3). In this regard, independent claims 96, 105 and 114 have been amended to explicitly recite the generally accepted legal criteria for finding a trade secret.

The Examiner inquires "What does the applicant mean by creating an application fingerprint from a content of the trade secret?" (Office Action of 10/6/04, page 3). In this regard, an application fingerprint is created using the values determined under the six factors and "may be calculated using a deterministic one-way algorithm, such as secure one-way hash codes, thereby providing a unique digital fingerprint associated with the information" (specification, pages 39-40).

The Examiner inquires "What is an application fingerprint and what is a content of the trade secret?" (Office Action of 10/6/04, page 3). As noted above, application fingerprints "may be calculated using a deterministic one-way algorithm, such as secure one-way hash codes, thereby providing a unique digital fingerprint associated with the information" (specification, pages 39-40). With regard to the "content of the trade secret", independent claims 97, 106, 115 have been amended to further clarify this limitation.

The Examiner inquires "What is a deterministic one-way algorithm?" (Office Action of 10/6/04, page 3). In this regard, deterministic one-way algorithms are well-known in the art. The applicant makes no claim to deterministic one-way algorithms except to the unique use of the algorithms in creating application fingerprints.

The Examiner inquires "What is the certificate fingerprint created from the application fingerprint?" (Office Action of 10/6/04, page 4). As clearly described on page 40 of the specification, a certificate fingerprint is a fingerprint that incorporates an application fingerprint into a trade secret certificate.

The Examiner inquires "What are the six factors of a trade secret as set forth in Section 757 of the First Restatement of Torts?" (Office Action of 10/6/04, page 4). In this

regard, the six factors are listed in Table C of the specification and have been explicitly incorporated into independent claims 96, 105, 114.

The Examiner asserts that "Claim 96 states that it is for a method of protecting a trade secret in the preamble. However, none of the steps comprise the protecting of a trade secret" (Office Action of 10/6/04, page 4). In this regard, the documentation of a trade secret would inherently be understood to provide protection for the trade secret by providing tangible evidence of the trade secret for litigation as described in the specification.

The Examiner asserts that in "claims 103, 112, the phrase 'such as' renders the claim indefinite" (Office Action of 10/6/04, page 4). In response, the claims have been amended to remove this limitation.

As such, the six factors of a trade secret and the process of creating and using application fingerprints is objectively enabled by the specification. Since the specification clearly enables these elements, any claim that is commensurate in scope with the specification would be understood to meet the requirements of 35 U.S.C. §112, second paragraph. Since the claims clearly meet the requirements of 35 U.S.C. §112, second paragraph, the rejections are believed to be improper and should be withdrawn.

5. Claims 96-104 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. In particular, the Examiner asserts that:

In the present case, claims 96-104 only recite an abstract idea. The recited steps of merely applying a plurality of criteria, assigning a value and generating metrics form the values does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to protect something. There is not technology in the body of the claim. (Office Action of 10/6/04, page 5).

In response independent claims 96, 105, 114 have been further limited to a programmed computer and a programmed computer method. Support for this limitation can be found throughout the specification (e.g., page 10).

Independent claims 96, 105, 114 have also been limited to the use of a questionnaire. Support for this limitation is provided by the fact that Table C of the specification is, in fact, a questionnaire. Not only is Table C a questionnaire, but Table C also shows the six factors of a

trade secret as numbered sections of the questionnaire. Underneath each numbered factor is the specific question associated with that factor of the trade secret. Underneath each question are five multiple choice answers to each question, along with definitions of each multiple choice answer.

Independent claims 96, 105 and 114 have also been further limited to "providing a numerical score value to each of the responses" and to "a table of descriptive labels and definitions that converts the elicited responses received from the input device to a respective numerical score value for each of the six factors". Support for the numerical score value and the table of descriptive labels and definitions may be found on page 20 of the specification. The conversion of a response to a score value is implicit in the exemplary scale of 1 to 5 and the exemplary set of five possible responses to each question.

Independent claims 96, 105 and 114 have also been further limited to "the programmed computer ranking the plurality of trade secrets in ascending or descending order of the calculated metric" and "a comparator processor within the programmed computer that ranks the plurality of trade secrets". Support for the ranking of trade secrets may be found in line 23 of the Abstract, as originally filed. Ranking of the trade secrets in ascending or descending order is inherent in the definition of ranking.

As currently structured, independent claims 96, 105 and 114 meet each requirement of a statutory invention. The claimed invention clearly has a practical application. As clearly set forth in the specification "There is no reliable independent third party proof of the existence of a trade secret" (specification, page 2). The claims set forth a reliable method and apparatus that does, in fact, provide proof of the existence of trade secrets.

The claimed invention is also within the technological arts. The limitation of the claimed invention to a programmed computer method and apparatus clearly places the claimed invention within the technological arts.

The claimed invention is not a computer program or a data structure per se. The claimed invention is not directed to non-functional descriptive material and is not a natural phenomenon.

The claimed invention does involve a series of steps that are to be performed on a computer. The claimed invention does have pre-computer process activity including collection of the data required for evaluating the context and scope of the trade secret.

Since the claimed invention identifies and ranks trade secrets based upon a data set for

each trade secret, the claimed invention has a practical application and does not simply manipulate an abstract idea. While the claimed invention does do mathematical calculations, it is limited to the practical application of identifying and ranking trade secrets.

Returning now to the Office Action of 10/6/04, method Claims 96-104 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. At pages 4 and 5 of the outstanding Office Action, the Examiner asserts that:

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts, and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 96-104 only recite an abstract idea. The recited steps of merely applying a plurality of criteria, assigning a value and generating metrics form (sic., from) the values does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to protect something. There is not technology in the body of the claims.

The Examiner's rejection as set out above introduces a new standard for statutory subject matter, i.e., whether the claimed invention at issue fall within the "technological arts". The undersigned respectfully asserts that the use of this term has no basis in the decisions of the Supreme Court, the Court of Appeals for the Federal Circuit ("Federal Circuit"), or its predecessor court, the Court of Customs and Patent Appeals ("CCPA"). In particular, the term, "technological arts", does not appear in the most recent decisions of the Federal Circuit dealing with non-statutory subject matter, namely In re Alappat 33 F.3d 1526, 31 USPQ 2d 1545 (Fed. Cir. 1994) (en banc); State Street Bank and Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 47 USPQ 2d 1596 (Fed. Cir. 1998), cert. denied, 119 S.Ct. 851 (1999); and AT&T v. Excel, 50 USPQ 2d 1447 (Fed. Cir. 1999), cert. denied, 120 S.Ct. 368 (1999). Each of Alappat, State Street and AT&T stands for the proposition that neither a mathematical algorithm nor an

abstract idea is patentable subject matter, unless (1) it produces a useful, concrete and tangible result, (2) it is applied in a useful way or (3) it is reduced to a practical application. *State Street*, 149 F.3d at 137, 47 USPQ at 1601. Each of *Alappat*, *State Street* and *AT&T* has adopted the use of the "practical application" standard as the test for whether or not a particular claimed invention is statutory. Each of *Alappat*, *State Street* and *AT&T* do not mention, much less use the "technological art" standard as a test for whether a claimed invention is statutory.

Even though the "practical application" standard has been consistently used by the Federal Circuit since 1994, the Examiner has totally omitted any reference to this standard. Rather, the Examiner states, "For a claimed invention to be statutory, the claimed invention must be within the technological arts." See page 4 of the outstanding Office Action. The above quoted language regarding the Examiner's "technological arts" standard would, on its face, make this standard the dispositive test of whether an invention is statutory or not. If applicant's invention does not fall within the "technological arts" standard then it is not statutory. However, there is no support for the use of the "technological arts" standard, much less that such a standard is dispositive of whether an invention is statutory. In particular, there is no reference to the "technological arts" standard in any of the decisions of the Supreme Court, the Federal Circuit or the CCPA. It is elementary that the U.S. Patent and Trademark Office is subject to the judicial review of the Federal Circuit and, therefore, cannot overturn the decisions of the Federal Circuit including particularly the Alappat, the State Street and the AT&T decisions.

The Examiner further elaborates on the "technological arts" standard, stating that,

Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the "technological arts" fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter.

The Examiner's further elaboration on the "technological arts" standard is confusing. First, the undersigned is at a loss to know how an invention would be required to promote the "progress of science and the useful arts" to be considered statutory. Further, a requirement that an invention promote the "progress of science and the useful arts" finds no support in the decisions of the

Supreme Court, the Federal Circuit or its predecessor, the CCPA. Second, the Examiner apparently quotes from the Constitution of the United States in her reference to the "progress of science and the useful arts". The Examiner attempts to clarify that the sciences that she is referring to is the physical sciences, as opposed to the social sciences. This use of "science" is confusing in that at the time the Constitution was written, the term "science" referred then to literary endeavors, whereas the term "useful arts" referred to the industrial arts.

The undersigned respectfully traverses the Examiner's statement that, "In the present case, claims 96-104 only recite an abstract idea. The recited steps of merely applying a plurality of criteria, assigning a value and generating metrics from the values does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of pencil and paper." The decisions in Alappat, State Street, and AT&T, do not support the use of a test that inquires as to whether the method steps may be carried out in the mind of the user or by use of a pencil and paper. In State Street, the Federal Circuit noted that the complexity of the calculations carried out would normally require the use of a computer or like device. However, it is contemplated that though impractical, the State Street, calculations could have been performed in the mind of a user or by use of a pencil and paper without affecting the Federal Circuit's decision that the State Street invention was statutory.

In each of its Alappat, State Street, and AT&T decisions, the Federal Circuit clearly indicates that whether or not the invention at issue is statutory does not depend on whether or not the claimed invention "involves inputting numbers, calculating numbers, outputting numbers and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless of course its operation does not produce a 'useful, concrete and tangible result." Alappat, 33 F3d at 1544, 31 USPQ 2d at 1557. Thus the "steps recited by applicant of merely applying a plurality of criteria, assigning a value and generating metrics from the values" would only be non-statutory if the operation of the invention does not produce a "useful, concrete and tangible result" or a "practical application" of the recited mathematical steps. As will be discussed below, the output of applicant's mathematical processing is clearly a practical application and, therefore, statutory.

Thus, the critical issue as to whether applicant's invention is statutory or not, depends on whether it provides a "useful, concrete and tangible result" or a "practical application" of his mathematical processes. In the following, applicant will compare the output or result of each of the inventions at issue in the Alappat, State Street and AT&T with the result or application of his claimed invention. Applicant's invention is a process or apparatus for determining whether or not certain data is or is not a trade secret. The data entered into applicant's invention relates to various aspects of a trade secret. Determining whether a certain system or process is a trade secret increases the value of that system or process. When the system or process is determined to be a trade secret, a description of the identified trade secret is taken and stored in a data file. In a further aspect of applicant's invention, a plurality of potential trade secrets may be examined. Each of the plurality of potential trade secrets is compared with six factors that determine whether any of the potential trade secrets is a trade secret. In particular, a metric of each potential trade secret is calculated and compared with a threshold value. If the metric of the potential trade secret exceeds the threshold value, that potential trade secret is then determined to be a trade secret. Alternatively, the plurality of potential trade secrets may be ranked, whereby a potential trade secret of higher rank indicates that it conforms to a greater degree with its six factors.

Thus, there is a real world value to applicant's output or results. First, the identification of a particular system or process as a trade secret increases the value of that technology. In addition, at the point in time that a particular system or process is identified as a trade secret, a certificate is constructed and stored to save the characteristics of that system or process at that point in time. In a practical sense, it is important to keep track of a description of a trade secret, which may change in time. Still further, the ranking of trade secrets in an order determines the degree of conformity of that trade secret to its six factors. The closer the conformity, the more valuable the trade secret is.

In Alappat, the invention at issue involved a display device similar to a cathode ray tube used in a TV set and, in particular, to an anti-aliasing system wherein the value of a signal that sets the intensity of each wave form making up the displayed image is calculated. Employing Alappat's anti-aliasing technique eliminates any apparent discontinuity, jaggedness, or

oscillation in the displayed wave forms, whereby a smooth continuous wave form is displayed. In lay terms, the displayed device had a clearer picture. Thus, *Alappat*'s anti-aliasing system could not be merely deemed an abstract idea, "but rather a specific machine to produce a useful, concrete and tangible result." *Alappat*, 31 USPQ 2d at p. 1557. In this instance, the useful result or practical application resulted in an improved cathode ray tube.

In *State Street*, the invention at issue "related to the management of mutual funds and, in particular, of such funds arranged in a "Hub and Spoke" configuration. This arrangement is a financial construct and, more specifically, an investment structure wherein a family of mutual funds (the Spokes) pool their assets into an investment portfolia (the Hub), thereby realizing economics of scale from administrative costs and beneficial tax consequences. In particular, this system provides means for a daily allocation of assets for the Spokes that are invested in the Hub. The system determines the percentage share that each Spoke maintains in the Hub, while taking into consideration daily changes in both the value of the Hub's investment securities (gains and losses) and the Hub's daily income and expenses. Thus, the system could determine not only the entire value of a Spoke mutual fund but also the price of a share of that fund. *State Street*, 47 USPQ 2d at 1598.

The Federal Circuit determined that the claimed invention in *State Street* at issue was statutury, stating:

[t]oday, we hold that the transformation of data, rerpesenting discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result" – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. *State Street*, 47 USPQ 2d at 1601.

Of similar import, the *State Street* court concluded that, "claim 1 is directed to a machine programmed with the Hub and Spoke software and admittedly produces a 'useful, concrete, and tangible result' This renders it statutory subject matter, even if the useful result is expressed in numbers, such as price, profit, percentage, cost, or loss. *State Street*, 47 USPQ 2d at 1601.

In AT&T, the method claims at issue employed a primary interexchange carrier (PIC) to keep track of which of a plurality of interexchange carriers ("IXCs") of a telecommunication system upon which a long distance call is routed. The PIC identifies the particular IXC and is included within a message record, which is transmitted to a message accumulation system for processing and billing. The PIC permits a carrier to provide differential billing treatment to subscribers, depending on whether the subscriber calls someone with the same or a different IXC. The Federal Circuit held that the "ultimate issue" is "whether the mathematical outlook is applied in a practical manner to produce a useful result". AT&T, 50 USPQ 2d 1453. Relying on Arrhythmia Research Tech., Inc. v. Corazonix Corp., 958 F.2d 1053, 1060, 22 USPQ 2d 1033, 1039 (Fed. Cir. 1992), the AT&T court stated "That the product is numerical is not a criterian of whether the claim is directed to statutory subject matter." Appreciating that the invention at issue in AT&T applies Boolean algebra to determine the value of the PIC indicator, and applies that value through switching and recording mechanisms to create a signal useful for billing purposes, that invention produces a useful, concrete, tangible result without preempting the Boolean processing and, thus, "the claimed process comfortably falls within the scope of §101". *AT&T*, 50 USPQ2d 1452.

Applicant respectfully asserts that the output or result of his mathematical process is similar to those of the Alappat, State Street and AT&T inventions and, therefore, is also statutory. Applicant's output in the form of a data file or certificate is similar to the PIC of AT&T. In particular, both outputs are expressed merely as a value or number, which respectively indicate the presence of a trade secret and a value similar to a particular call recipient's PIC, which facilitates differential billing of long-distance calls made by an IXC's subscriber. Similarly, Arrhythmia processed a number representing a signal related to the patient's heart activity, i.e., an indication of the condition of a patient's heart activity. Though each of applicant's, AT&T's and Arrhythmia's inventions deals with data indicative of a number or numerical value, each such output is related to a practical application, e.g., the existance or conformity of a trade secret to a number of factors, the calculated value of a share of a mutual fund, and a flag, i.e., the PIC indicator, which identifies which party will be billed for a particular long distance call. All of these outputs, including applicant's, also relate to a number whose value is indicative of the monetary worth of a trade secret, a mutual fund share, or the monetary amount to be billed to a particular long distance caller. The output derived from Alappat sets the intensity at which

vectors will be displayed on a cathode ray tube to avoid jitter or discontinuities and to provide an improved, clearer image. Applicant respectfully asserts that his system or process outputs a set of ranked trade secrets, which provides a process of identifying their conformity to the six factors and, thus, the values of these trade secrets. Thus, applicant asserts that the application of his values and those of *Alappat* similarly represent the quality of performance of each process and thereby the monetary value of the outputted data.

In view of the above comparisons, the practical application of applicant's trade secrets are similar to the useful, practical applications analyzed in the *Alappat*, *State Street* and *AT&T* inventions and are likewise deemed to be statutory under 35 USC §101.

In summary, the claimed invention is clearly statutory. Since the claims are statutory, the rejections are believed to be improper and should be withdrawn.

6. Claims 96, 102-104, 105, 111-113, 114 and 118 have been rejected as being anticipated by Barney et al. However, independent claims 96, 105 and 114 (as currently amended) require the use of a questionnaire. Barney et al. does not teach of the use of a questionnaire that elicits responses through an input device of a computer as to the extent that a trade secret meets each of the six factors of the First Restatement of Torts. Barney et al. also fails to provide any teaching regarding the method step (or apparatus for) "calculating the geometric mean, that is, the sixth root of the product of the numerical score values of c) to create a single metric for the trade secret". In addition, Barney et al. fail to provide any teaching regarding the ranking of trade secrets.

Since Barney et al. fails to teach each and every claim limitation, the rejections are believed to be improper. Since the rejections are improper, they should be withdrawn.

7. Claims 97-101, 106-110 and 115-117 have been rejected as being obvious over Barney et al. in view of Haber et al. However, independent claims 96, 105 and 114 (as currently amended) require the use of a questionnaire. Haber et al. (as with Barney et al.) does not teach of the use of a questionnaire that elicits responses through an input device of a computer as to the extent that a trade secret meets each of the six factors of the First Restatement of Torts. Haber et al. also fails to provide any teaching regarding the method step (or apparatus for) "calculating the geometric mean, that is, the sixth root of the product of the numerical score values of c) to create a single

metric for the trade secret". In addition, Haber et al. fails to provide any teaching regarding the ranking of trade secrets.

For any of the above reasons, the combination of Barney et al. and Haber et al. fail to teach each and every claim limitation. Since the combination fails to teach each and every claim limitation the rejections are believed to be improper and should be withdrawn.

8. Allowance of claims 96-118, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

Respectfully submitted,

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